

Date: Wed, 16 Mar 94 04:30:31 PST
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #68
To: Ham-Ant

Ham-Ant Digest Wed, 16 Mar 94 Volume 94 : Issue 68

Today's Topics:

 Field Day Antennas
 looking for comments...
 NOAA Antenna Advice please
 Subscribe
 test (2 msgs)
 Thick Ethernet as Transmission Line? (3 msgs)

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 14 Mar 94 14:31:05 GMT
From: ncrgw2.ncr.com!ncrhub2!tdbunews!nsc32!wps@uunet.uu.net
Subject: Field Day Antennas
To: ham-ant@ucsd.edu

Last year one of the guys in our club brought a weather balloon and a long wire.
The wind got too much to keep the balloon up, so the long wire, was stung from
tree to lamp pole to lamp pole, etc. A tuner matched the wire from 160m through
10m. It is my understanding that the balloon will be tried again this year. We
are
hoping for less wind.

Bill

Bill Starkgraf wps@ElSegundoCA.ncr.com
AT&T Global Information Solutions (310) 524-5754

El Segundo, CA

(800) 222-6245 x5754

Call: KD6UQB

Simi Settlers ARC
Simi Valley, CA

Date: 15 Mar 1994 17:30:56 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!usc!
elroy.jpl.nasa.gov!swrinde!sgiblab!cs.uoregon.edu!news.uoregon.edu!
oregon.uoregon.edu!TTRENT@network.ucsd.edu
Subject: looking for comments...
To: ham-ant@ucsd.edu

Terry Burge asked about perhaps putting up a 5/8 wave vertical for 20 mtrs., mounted with about 60 radials, only 20 or so feet long. I used a cheapo MFJ tuner at the feedpoint and got a good match across the entire 20 meter band. It would also load up well on 40 with the same settings: I still don't know why or how. This was an excellent Dx performer on 20 and 40, and was mediocre on 80. I later moved the tuner into the shack, using heliax for a feeder, about 30 feet, and noticed little or no difference. BTW, the strong low-angle on 20 meters from the antenna caused some big-time telephone RFI, which I had to fix for a few neighbors right after the first big springtime night opening over the pole into Europe. Good luck!

Date: Tue, 15 Mar 1994 14:48:48 GMT
From: catfish!cscsun!dtiller@uunet.uu.net
Subject: NOAA Antenna Advice please
To: ham-ant@ucsd.edu

Herb Dieben (ag381@FreeNet.Carleton.CA) wrote:

: Please comment on the following;
: I have been trying to get NOAA and or Meteor data using a simple 137 Mhz
: J-pole with an antenna mounted GasFet pre-amp. The feed line is about 40 feet
: of RG8. Results of 24hr/day monitoring for about 8 days has yielded nothing
: at all.
: If the antenna is the problem, how much better do I have to be?? A computer
: controlled 20 element Yagi seems a bit much to make but could be done.
: Problem is that I have no assurance that that is good enough. So what should
: be the next step?
: Any advice would be much appreciated. Thanks in advance. Herb.

Seeing as I can get NOAA and Meteor birds on my scanner with a rubber duck

antenna, I'd say there's something else wrong....what freq are you trying?
Some birds are turned off periodically to prevent interference or because
their light angles are bad. There are regular postings about them on one
on the rec.radio groups - have a look, if you've never seen one.

--

David Tiller	Network Administrator	Voice: (804) 752-3710	
dtiller@rmc.edu	Randolph-Macon College	Fax: (804) 752-7231	
"Drunk, [Beowulf] slew	P.O. Box 5005	ICBM: 37d 42' 43.75" N	
no hearth companions."	Ashland, Va 23005	77d 31' 32.19" W	

Date: 16 Mar 94 05:03:49 GMT
From: news-mail-gateway@ucsd.edu
Subject: Subscribe
To: ham-ant@ucsd.edu

subscribe

wish to partake in antenna forum, TNX

Jim, K1ZX

Date: Tue, 15 Mar 1994 09:40:21
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!
darwin.sura.net!spitfire.navy.mil!nrl7350.nrlssc.navy.mil!
smith1@network.ucsd.edu
Subject: Test
To: ham-ant@ucsd.edu

This is a test

Date: 15 Mar 1994 13:50:57 -0800
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate.apple.com!apple.com!not-for-
mail@network.ucsd.edu
Subject: test
To: ham-ant@ucsd.edu

victorc%oakhill@sps.mot.com (Victor Chen) *keeps* posting:

>testing

What is this? The Internet equivalent of a kerchunk?

Kok Chen, AA6TY
Apple Computer, Inc.

kchen@apple.com

Date: 14 Mar 94 14:36:17 GMT
From: ncrgw2.ncr.com!ncrhub2!tdbunews!nsc32!wps@uunet.uu.net
Subject: Thick Ethernet as Transmission Line?
To: ham-ant@ucsd.edu

In article 2dd@search01.news.aol.com, nx7u@aol.com (NX7U) writes:

-->only for LOW power applications.
-->Probably stamped on the side of the cable somewhere is "30V MAX". These cables
-->are not designed for any degree of current/voltage stress or heat dissipation.
-->Other than that, they're fine!

When in doubt, one could always call Belden. I have some thin wire Ethernet
cable
and did not know if it could be used with 2m and 70cm, so I called Belden (I don't
have the number now - it is an 800 number) and explained what I wanted to do.
They assured me it would work just fine since they use such frequencies to test
their
cables.

Bill

Bill Starkgraf
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(310) 524-5754
(800) 222-6245 x5754

Call: KD6UQB
Simi Settlers ARC
Simi Valley, CA

Date: 15 Mar 1994 08:25:57 -0800
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!usenet.ins.cwru.edu!eff!
news.kei.com!ssd.intel.com!chnews!ornews.intel.com!ornews.intel.com!not-for-
mail@network.ucsd.edu
Subject: Thick Ethernet as Transmission Line?
To: ham-ant@ucsd.edu

In article <5Hg6ic5w165w@jackatak.raider.net> root@jackatak.raider.net (Jack GF Hill) writes:

>phil@hansen.ncd.com (Phil Graham) writes:

>

>> 2) At about 100MHz the attenuation starts to increase. I would not recommen
>> it for 2M or 70cm... Great for HF!

>

>*THAT* is what I said, and opined that the additional capacitance of
>teh multi-layer shield coverage might be the reason... I was booed and
>shoved aside.

>

>So, I am now curious. How did you make your measurements? What data
>led you to conclude your attenuation was poor above 100 MHz?

Let me jump in here and say that I've also found it to be lossy above about 100 Mhz. I don't use it for anything above 30Mhz now. I've tried both the yellow jacket stuff and some harse environment orange jacket. I don't have my Belden book here but it is 50 ohms and has no specs on VHF line loss. Since it wasn't working to my expectations on 2 meters, I removed the 100' piece and made some measurements. I used a dummy load/watt meter at the far end for the first test and the other test was made with the far end open while I checked the SWR at the driven end. The same tests with a similar length of RG-213 confirmed my suspicions that the Ethernet is lossy. I don't understand why because its got Teflon(tm) insulation, a copper coated, fat and solid center conductor, and is double shielded. Oh well. I probably shouldn't even be using it for 10 meters. While I don't remember the figures, I made the measurements when the line was fairly new and it had no Vampire taps in it. The yellow jacket has faded now. I had no trouble putting N connectors or PL-259's on it. Lately I've been using some 3/4" hardline that is surplus cable TV stuff. This is really good stuff but matching the 75 ohms is interesting and putting connectors on it is really a bitch.

--

zardoz@ornews.intel.com WA7LDV

Date: Tue, 15 Mar 1994 20:16:38 GMT

From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!

vixen.cso.uiuc.edu!sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!

news1.boi.hp.com!hp-pcd!hpcvsnz!tomb@network.ucsd.edu

Subject: Thick Ethernet as Transmission Line?

To: ham-ant@ucsd.edu

Jim Garver (zardoz@ornews.intel.com) wrote (about Thick Ethernet cable):

: Let me jump in here and say that I've also found it to be lossy above about
: 100 Mhz. I don't use it for anything above 30Mhz now. I've tried both the
: yellow jacket stuff and some harse environment orange jacket. I don't have
: my Belden book here but it is 50 ohms and has no specs on VHF line loss.
: Since it wasn't working to my expectations on 2 meters, I removed the 100'
: piece and made some measurements. I used a dummy load/watt meter at the
: far end for the first test and the other test was made with the far end
: open while I checked the SWR at the driven end. The same tests with a
: similar length of RG-213 confirmed my suspicions that the Ethernet is lossy.
: I don't understand why because its got Teflon(tm) insulation, a copper
: coated, fat and solid center conductor, and is double shielded. Oh well.

Very interesting! I have 300 feet of the foam Teflon insulated LAN
cable, foil/braid/foil/braid shielded, which I measured at 2M and 440,
and found to be almost exactly the attenuation I would predict from
the cable geometry. It was better on both bands than RG-213/U (specs
and measured same way), and worse than 9913 -- which is exactly what
I expected.

What's going on here? Anyone else out there measured the stuff? Like
Jim notes, if there is higher loss at VHF-UHF, what is the loss mechanism?
Though the catalog specs (Belden) don't go above 100MHz, they do follow
the expected \sqrt{f} pattern that far. Could some lengths have enough
local impedance variation with distance that they start acting like
filters above 100MHz?

73, K7ITM

Date: 15 Mar 1994 21:01:26 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!cs.utexas.edu!
swrinde!sdd.hp.com!hpscit.sc.hp.com!spikes@network.ucsd.edu
To: ham-ant@ucsd.edu

References <2lo8jt\$nnj@search01.news.aol.com>, <5731@tdbunews.teradata.COM>,
<1994Mar15.165720.9429@VFL.Paramax.COM>p.com
Subject : Re: Field Day Antennas

Pete Rossi (rossi@VFL.Paramax.COM) wrote:

: Use the wind as an advantage. If your FD location has steady dependable
: winds then use a kite.

: Last year I operated FD from the beach were there was a nice steady 10-15 MPH
: breeze all day. A 3 ft delta kite kept 33 feet of #22 wire (for 20 meters)
: vertical for several hours. No problems. Worked great. I may try the

--jesse

End of Ham-Ant Digest V94 #68
